



“Déjà Vu All Over Again” The Disappointing Health Status of Canadian Op APOLLO (Afghanistan/SW Asia) Returnees Mark Zamorski, MD, MHSA Post-deployment Health Section Directorate of Medical Policy Canadian Forces



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Acknowledgements

- Mr. Terry Humeniuk
- Col Ken Scott
- LCol Henry Matheson
- CF members who participated



Rationale

- Following certain deployments, CF members have an increased risk of:
 - Mental distress and diagnosable mental illness
 - Medically unexplained physical symptoms [“MUPS,” or “Gulf War Syndrome”]
- Numerous prevention strategies have been undertaken...

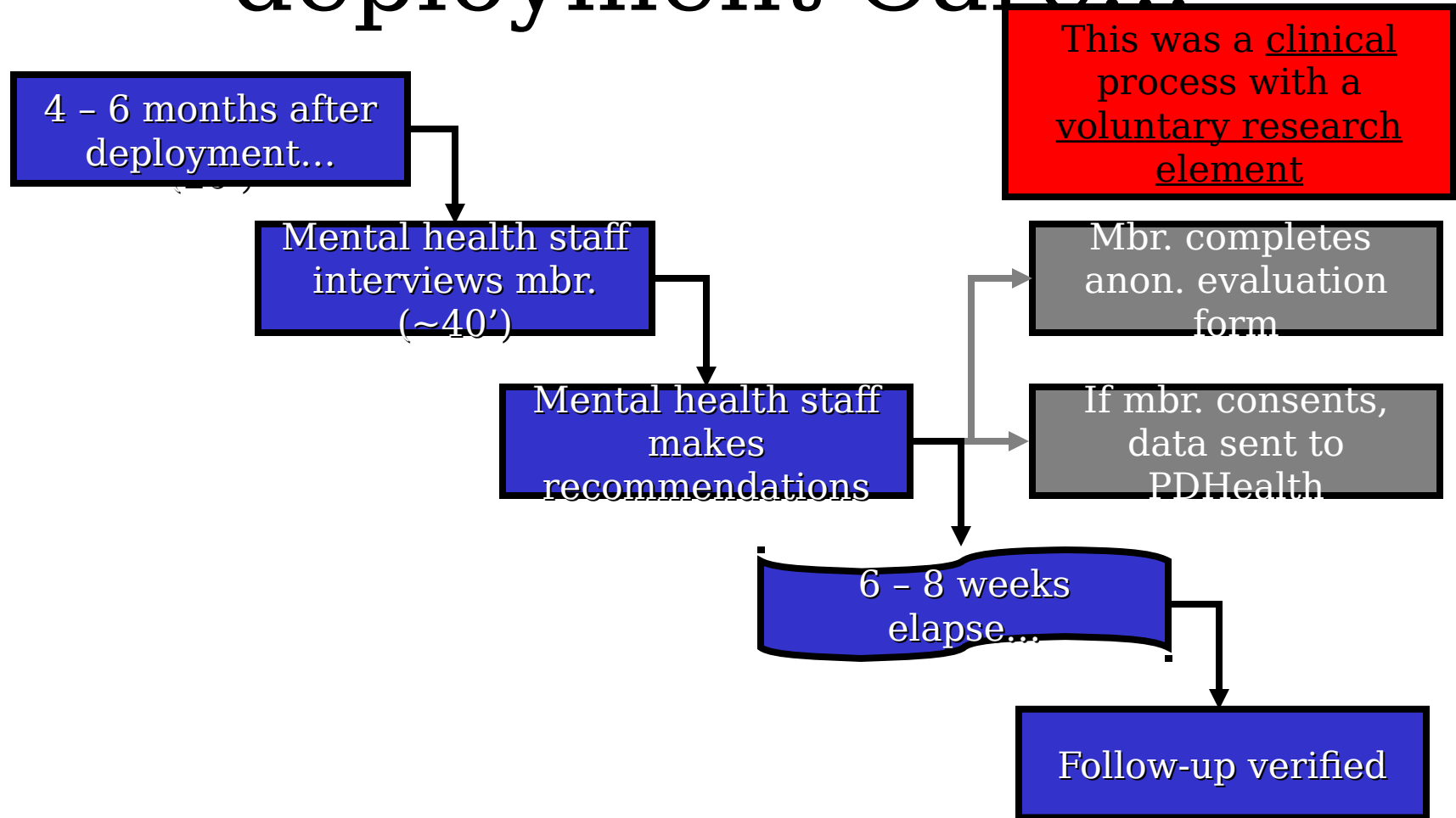


...when they fail, will early intervention help?

- Depression, problem drinking:
YES
- PTSD, MIPs: Maybe
- **At best, the potential benefits are modest**
- **And harm is a possibility...**



In Response to Previous Deficiencies in Post-deployment Care...



Sample Characteristics

- 95% male
- Ave. age = **34**
- 40% Army, 40% Navy, 20% Air Force
- Ave. years in CF = **14**
- Ave. number of previous deployments = **2.6**
- Interviewed an average of 156 (SD=81) days after return
 - **NB: Army done 45 days earlier than others**



The Deployment Experience

- Land:
 - 1st CF ground forces combat mission since Korean War
 - Fatal friendly fire incident (first combat fatalities since Korean War)
 - “Rustic” conditions
- Sea: Maritime blockade
- Air: Strategic and tactical airlift

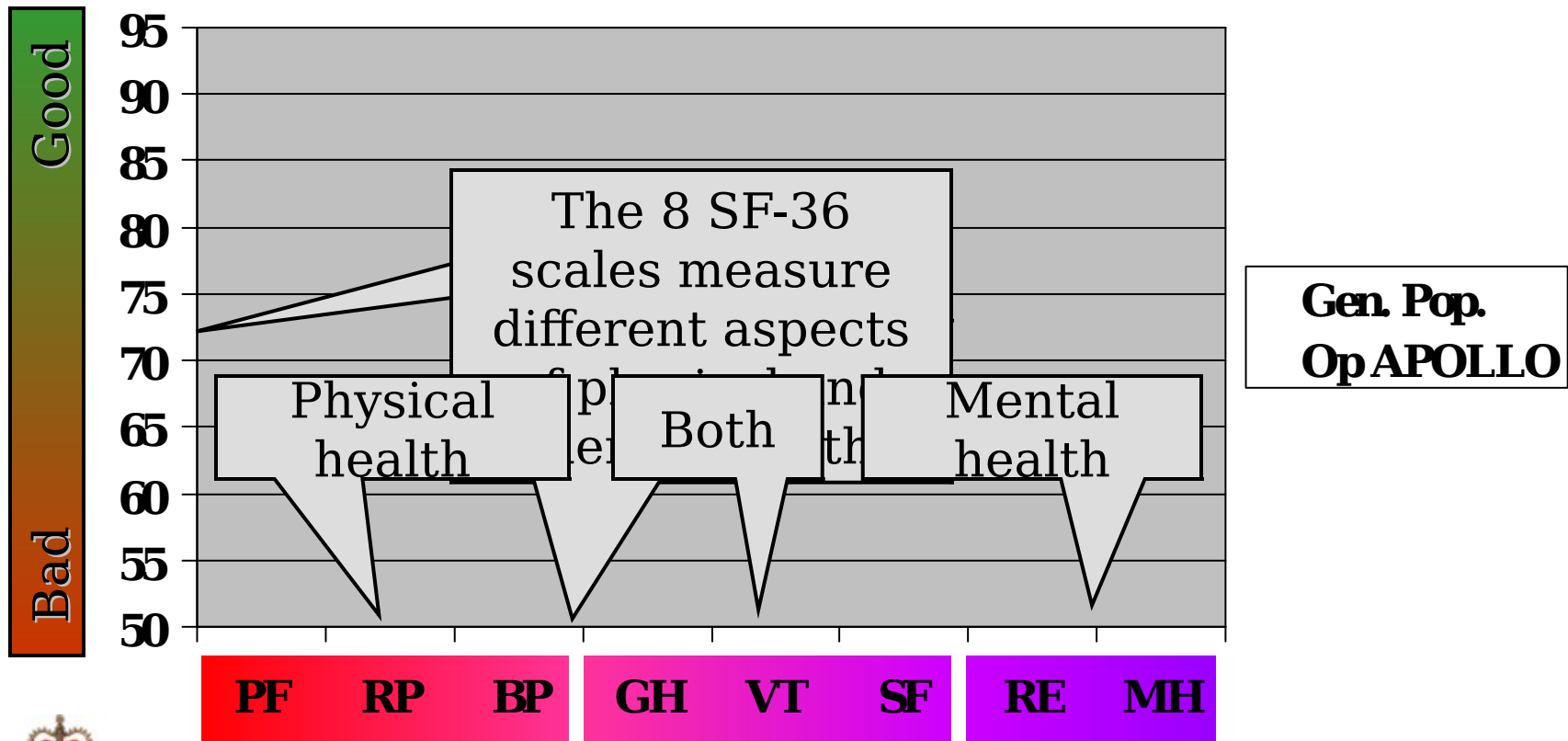


Instruments

- SF-36 Health Survey:
 - Health-related quality of life
- PRIME-MD PHQ:
 - Symptoms, mental illness, stressors
- [CF Short Mississippi Scale:]
 - Proved invalid for PTSD phenomenology



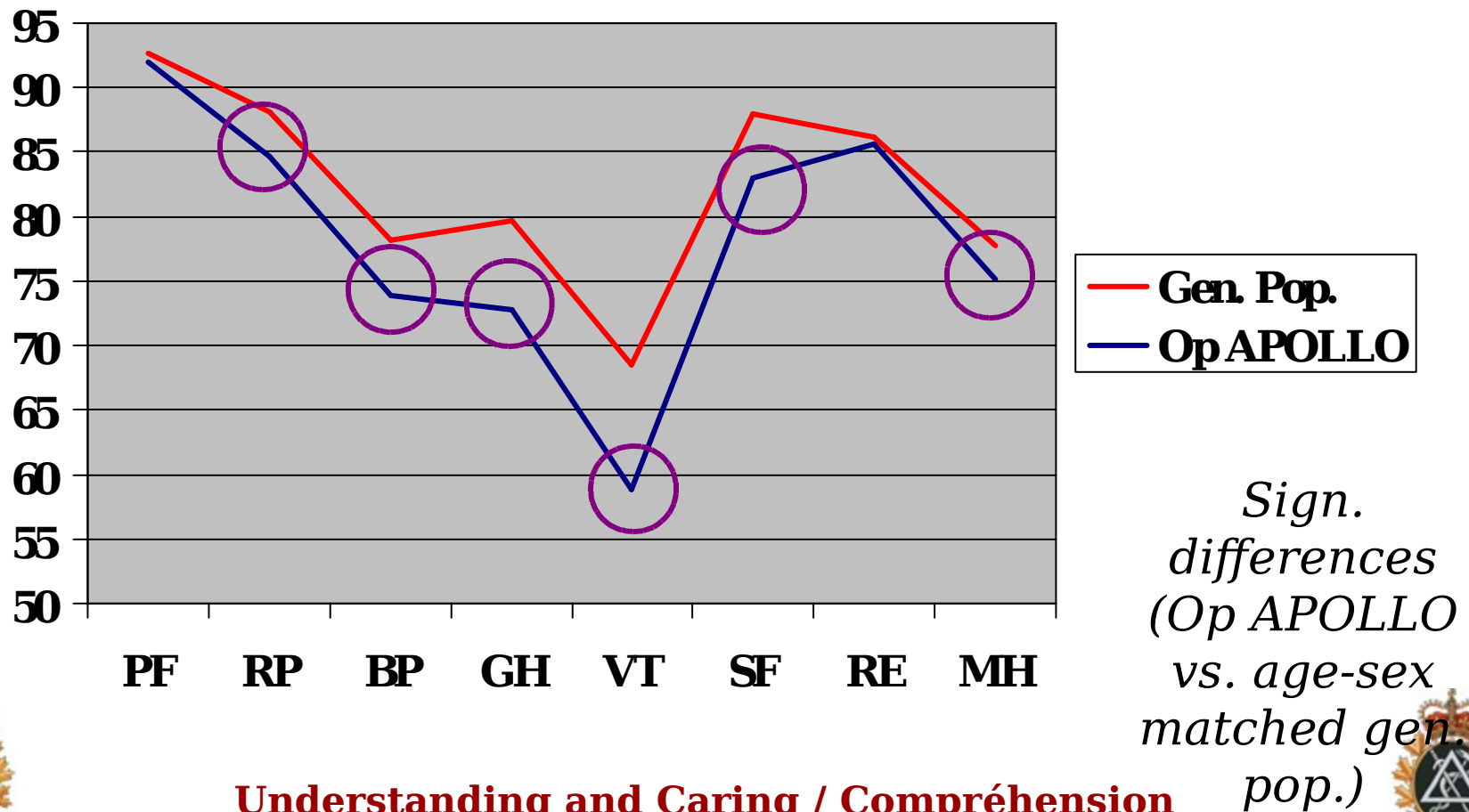
SF-36 Health Survey Results



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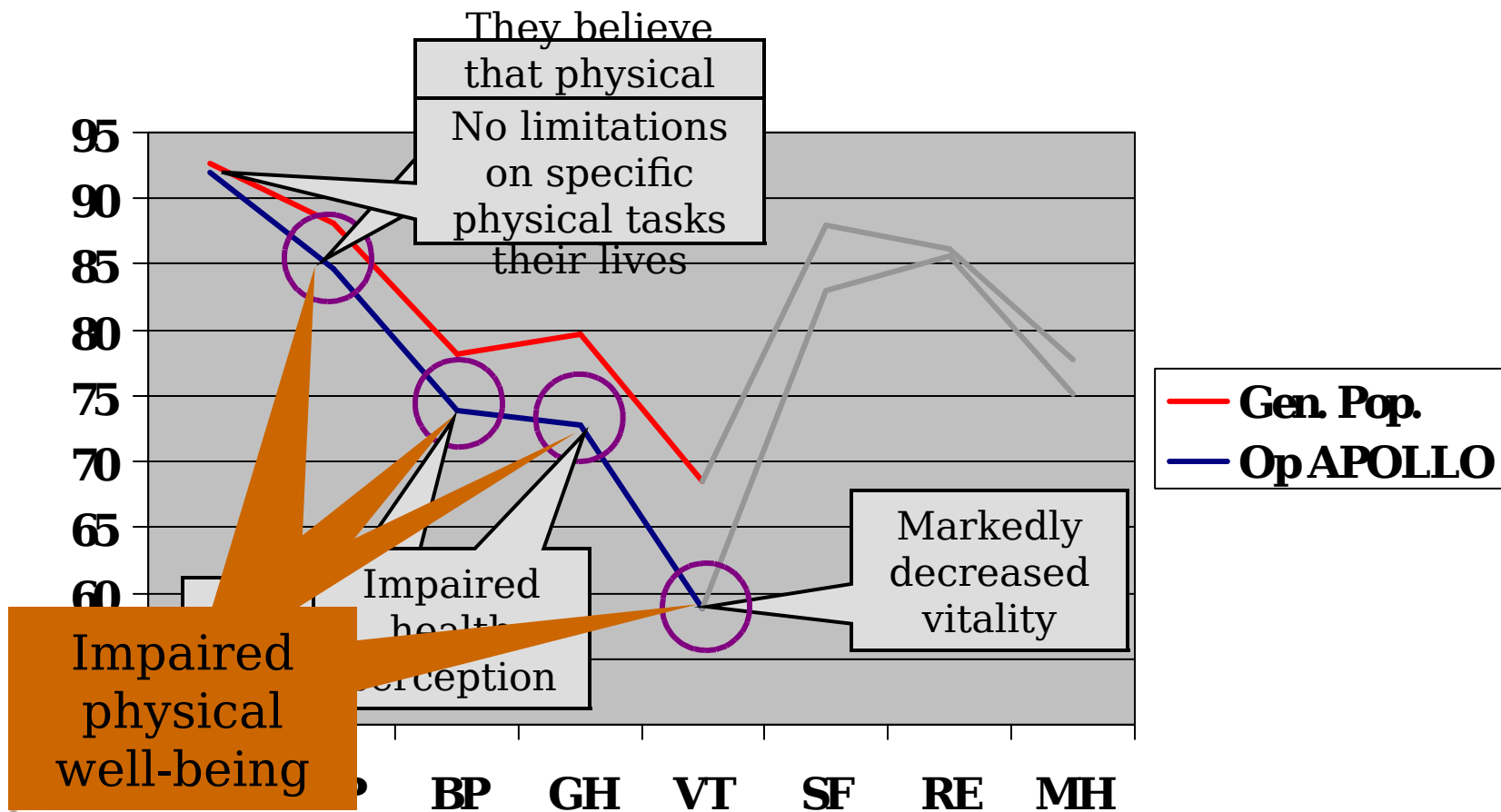
SF-36 Health Survey Results



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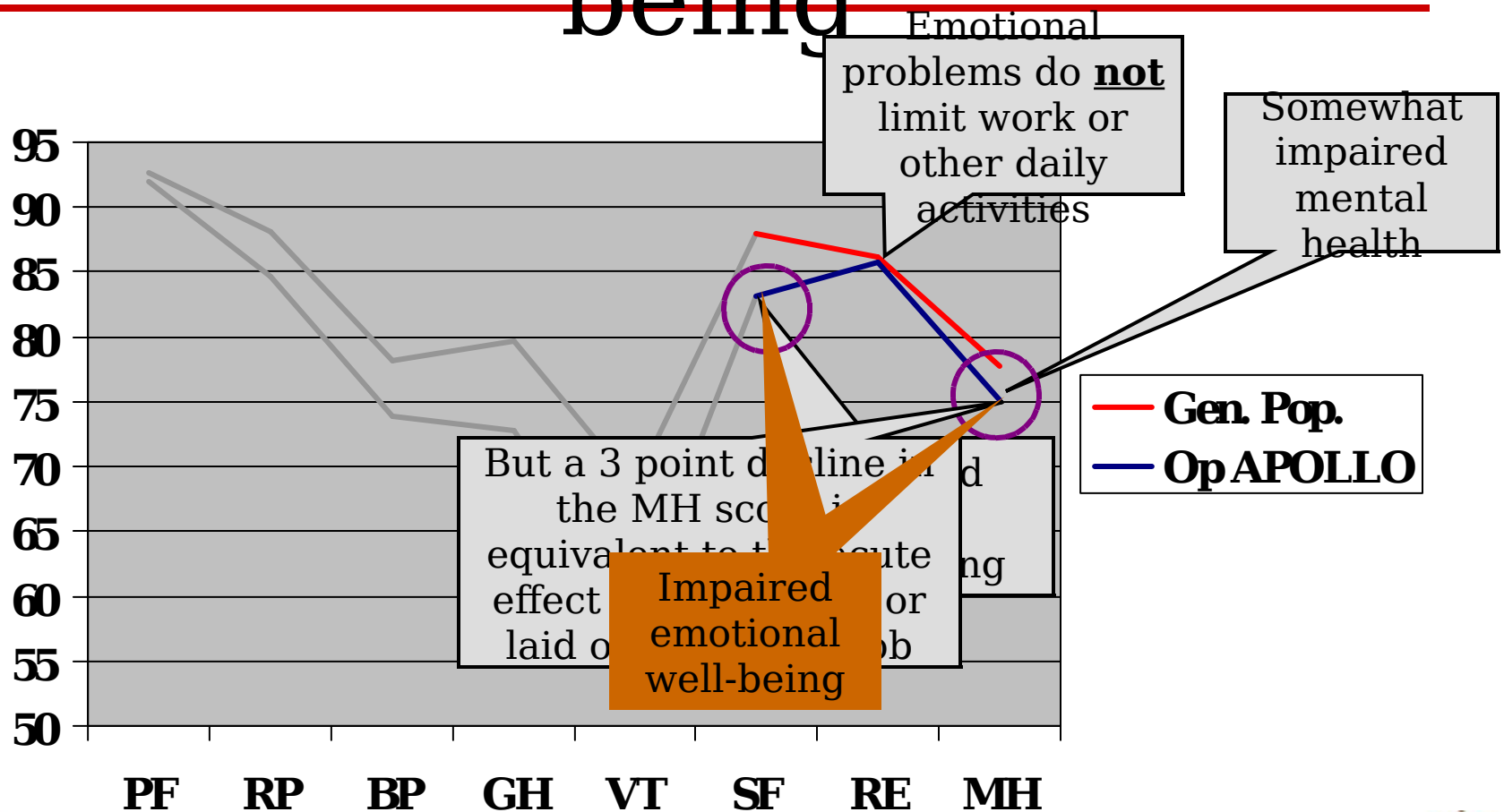
SF-36: Physical Well-being



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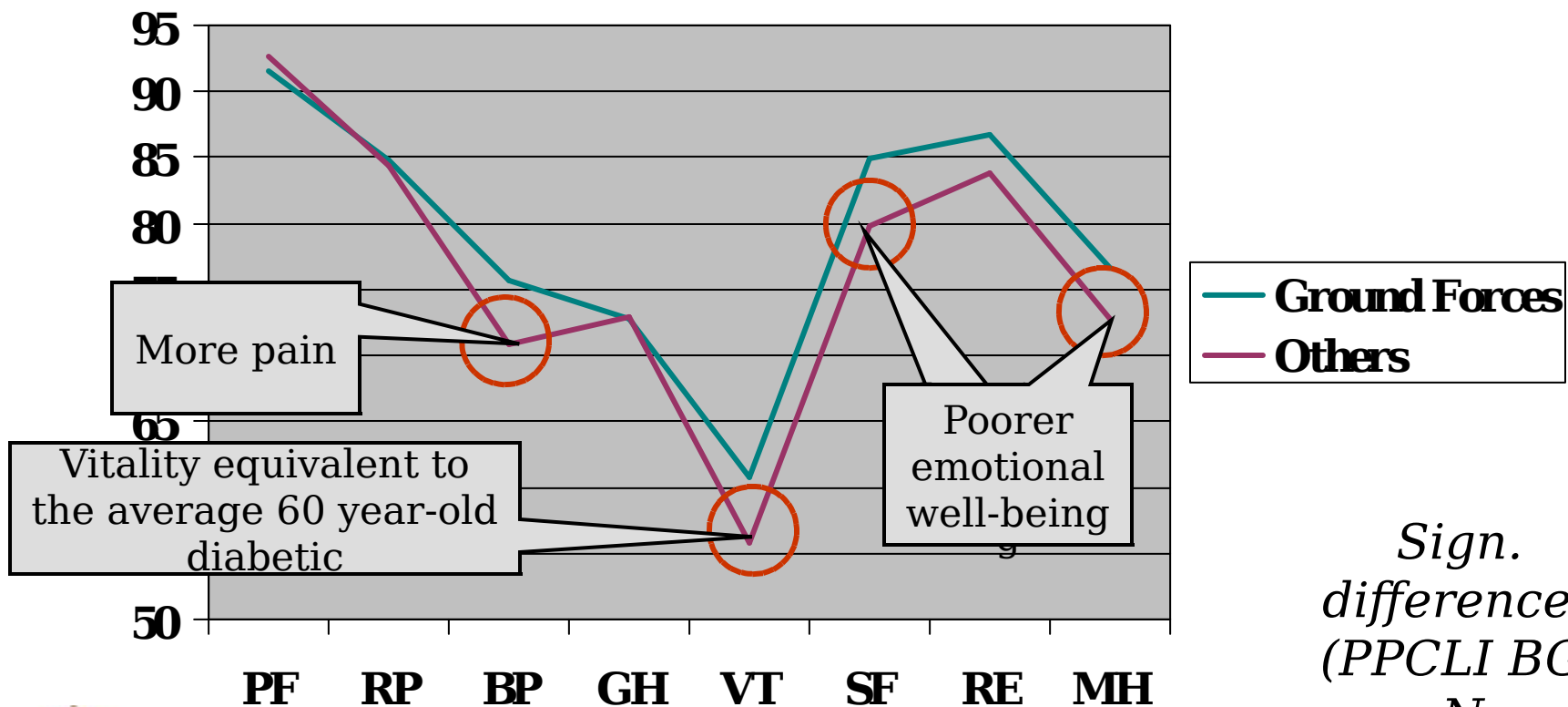


SF-36: Emotional Well-being



SF-36 Health Survey Results:

~~Ground Forces vs. Others~~

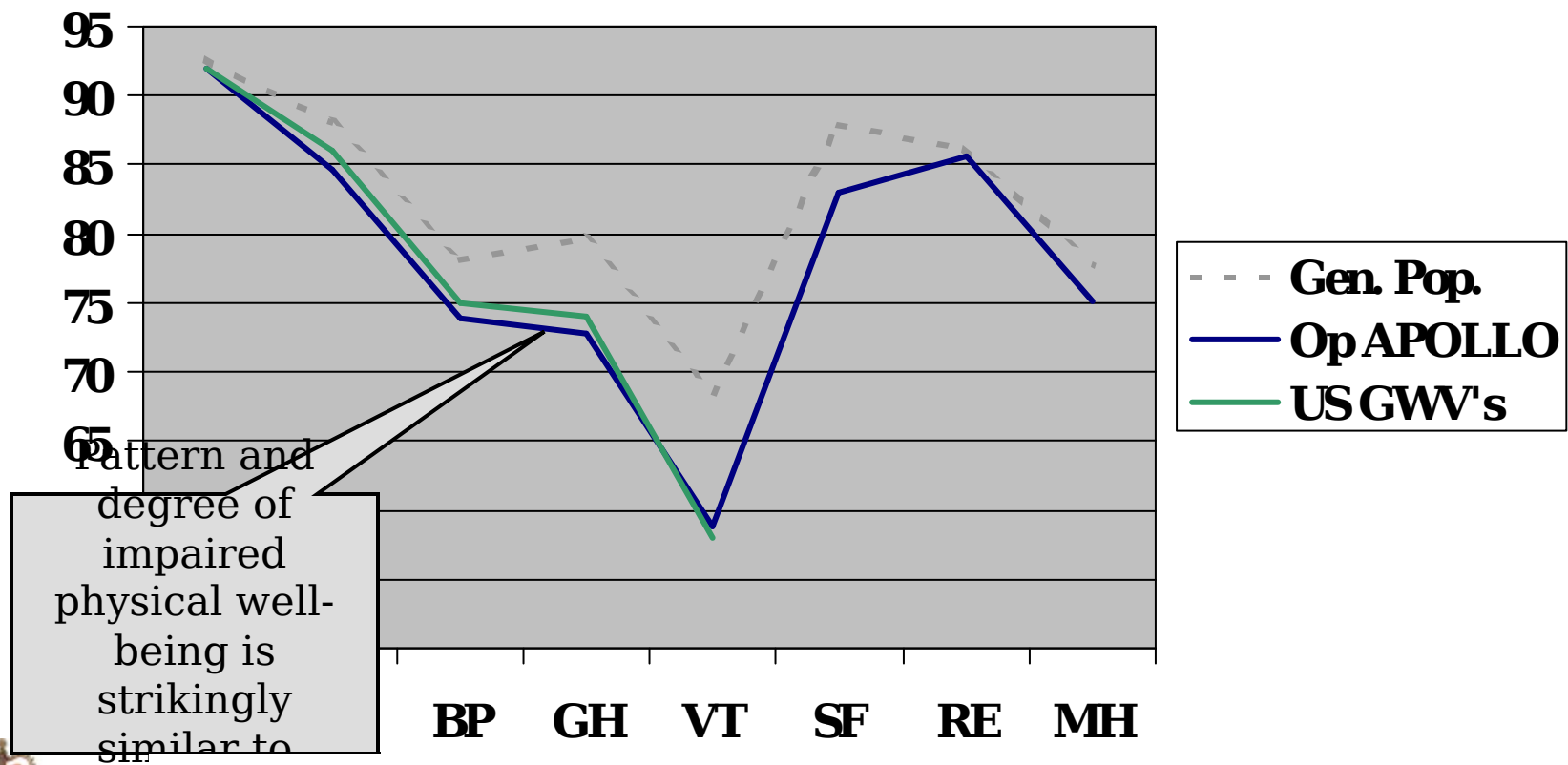


*Sign.
differences
(PPCLI BG
vs. Non-
PPCLI BG)*

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SF-36: Comparison with US Gulf War Veterans (GWV's) (6 years post- conflict)

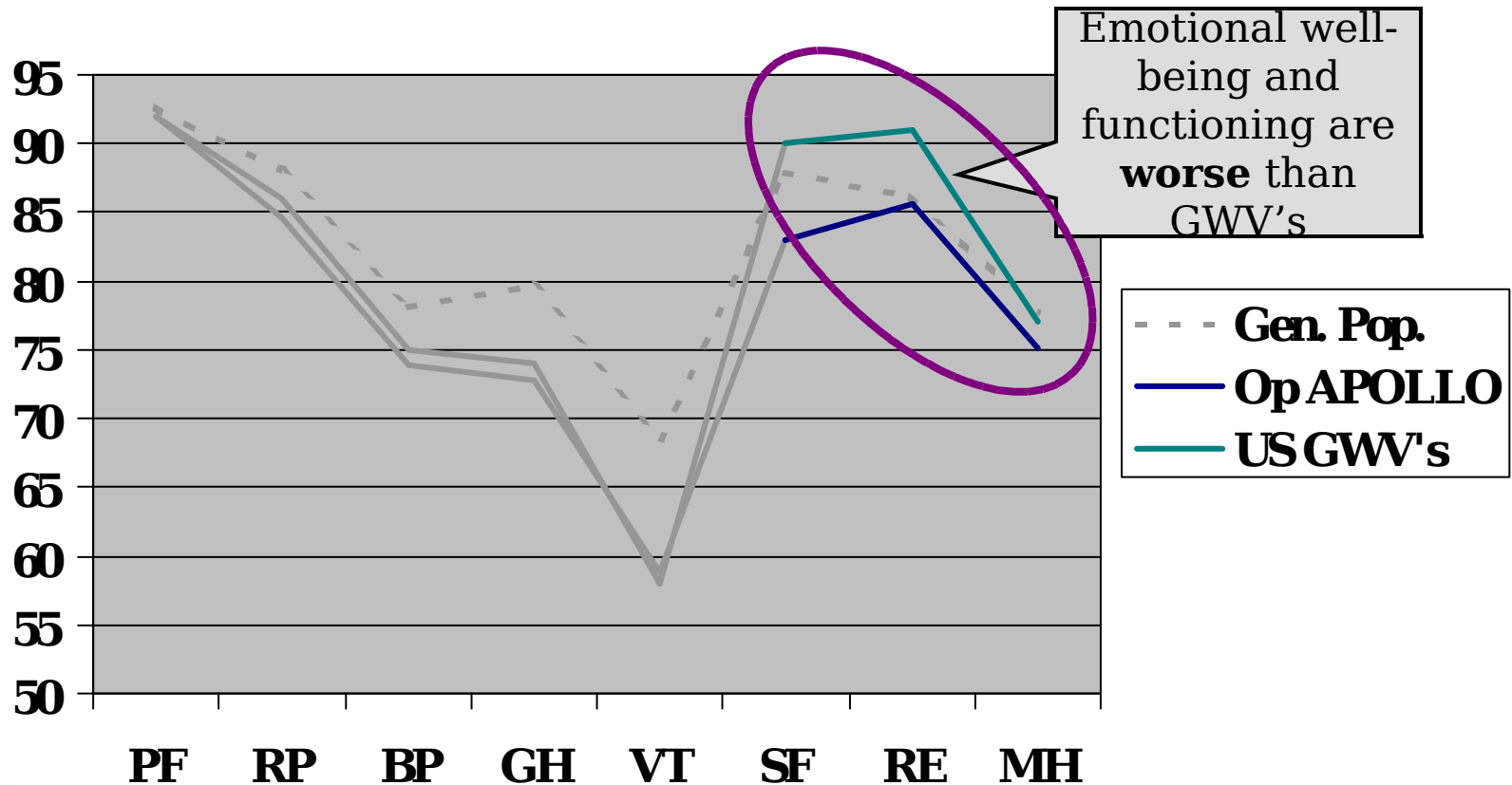


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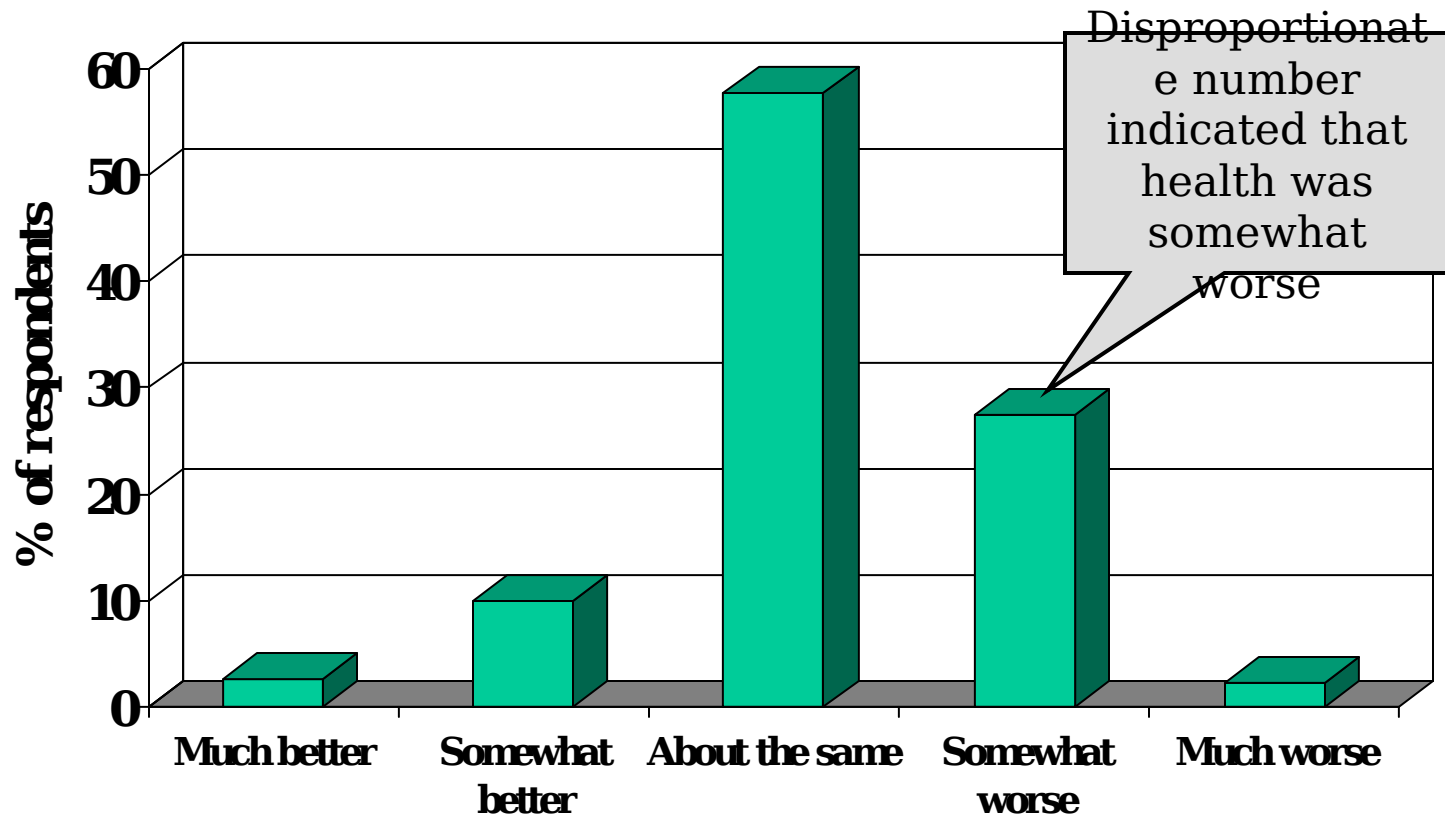
SF-36: Comparison with US Gulf War Veterans



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Compared to one year ago, how would you rate your health in general now?



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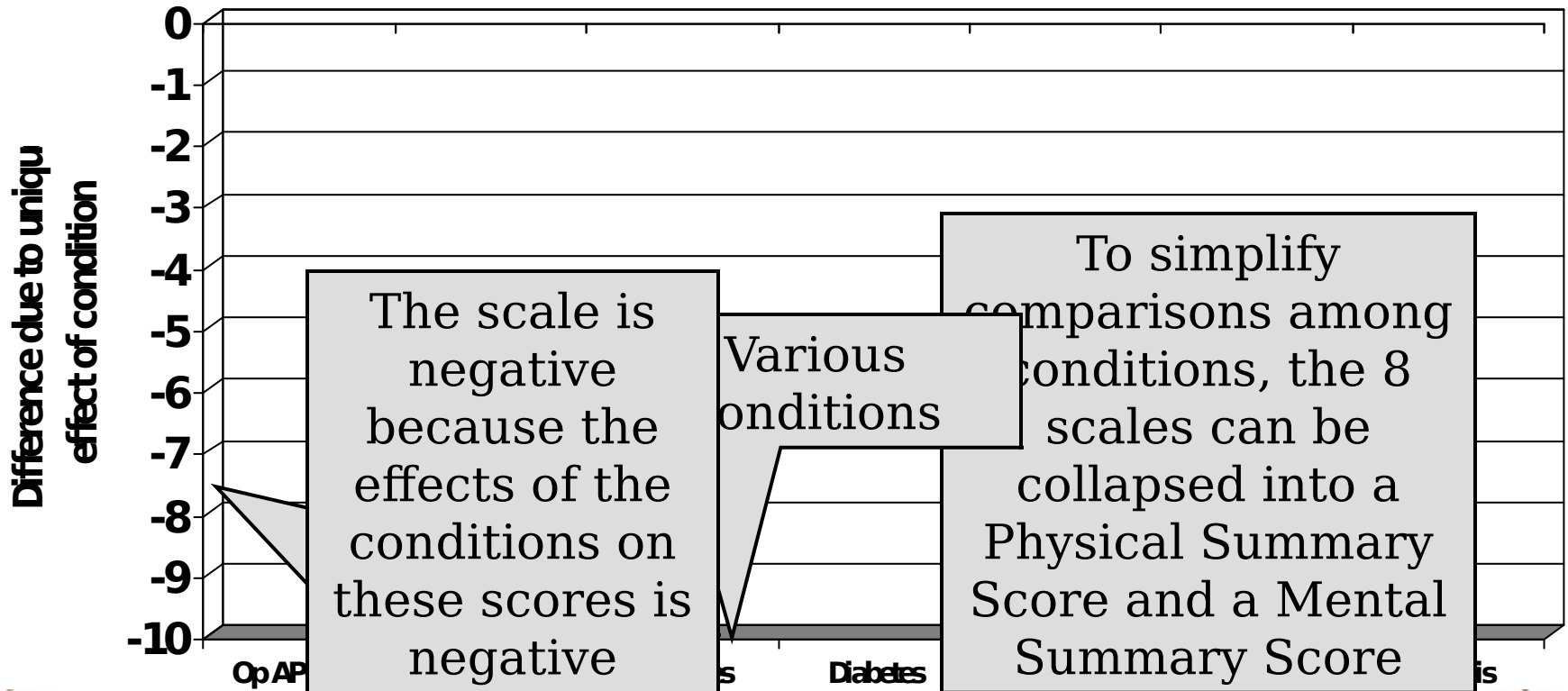


Other Reasons to Believe That Some of This Is a Deployment Effect

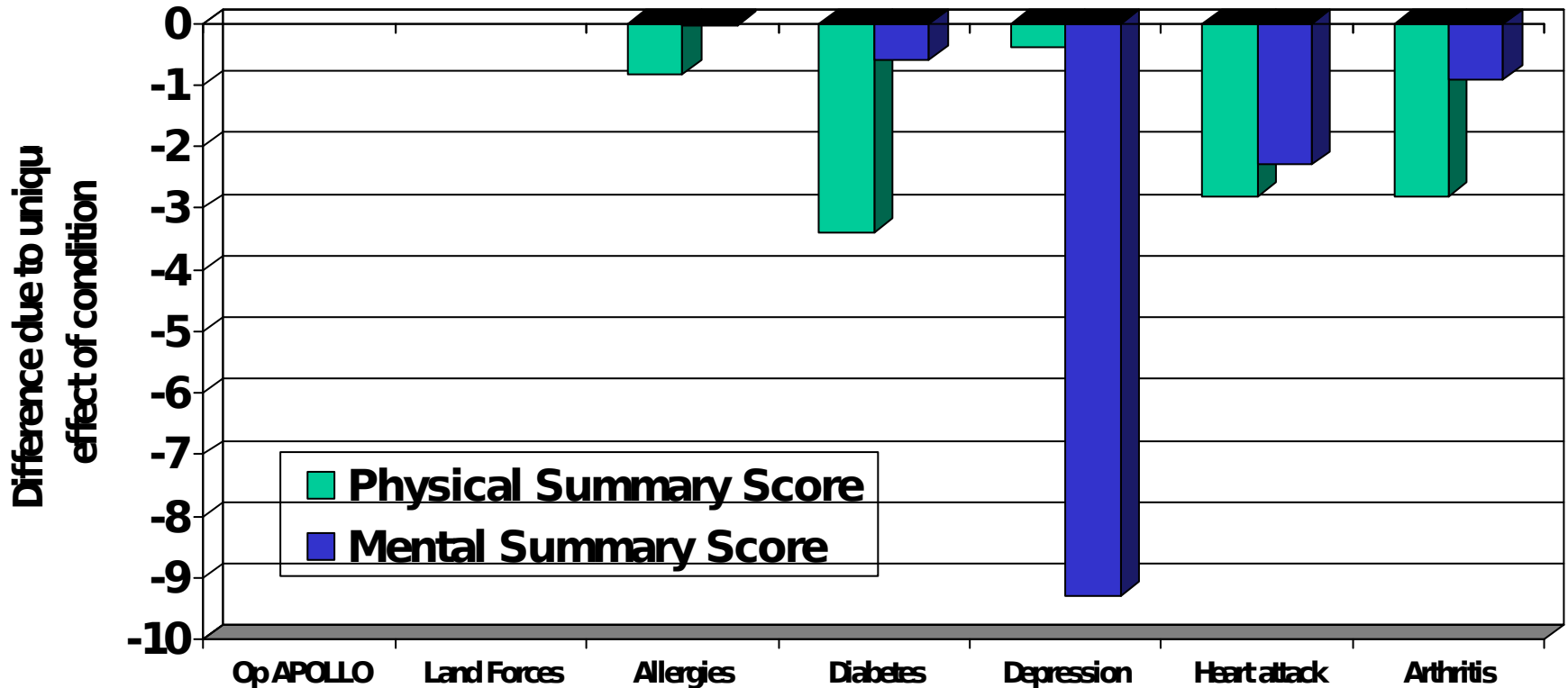
- Data from other surveys (Goss Gilroy, PERSTEMPO, Health and Lifestyle) suggest that health of CF members is **poorer than that of the general population**, but...
 - The magnitude of those differences was smaller
- Deployment experiences of some were of the sort expected to cause problems



The Unique Effect of Various Conditions on SF-36 Summary Scores



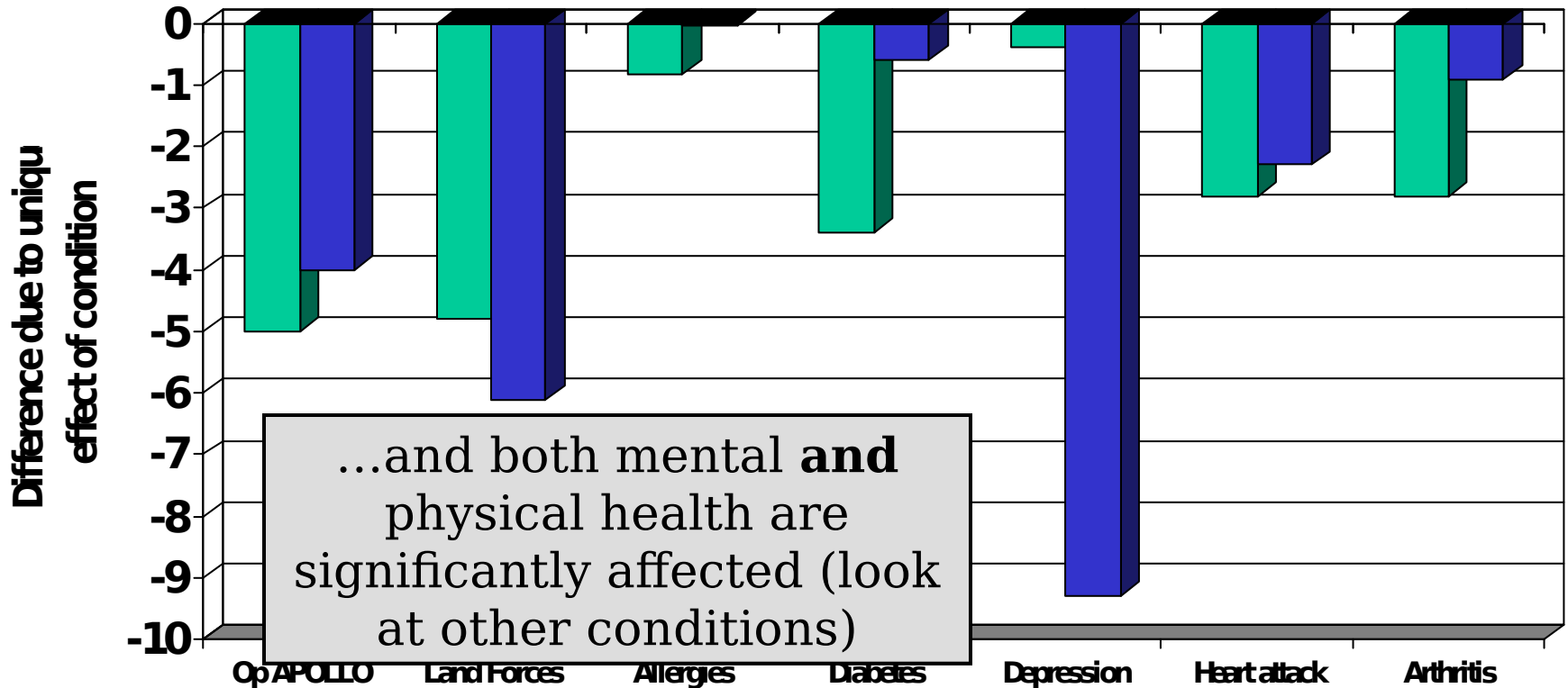
The Unique Effect of Various Conditions on SF-36 Summary Scores



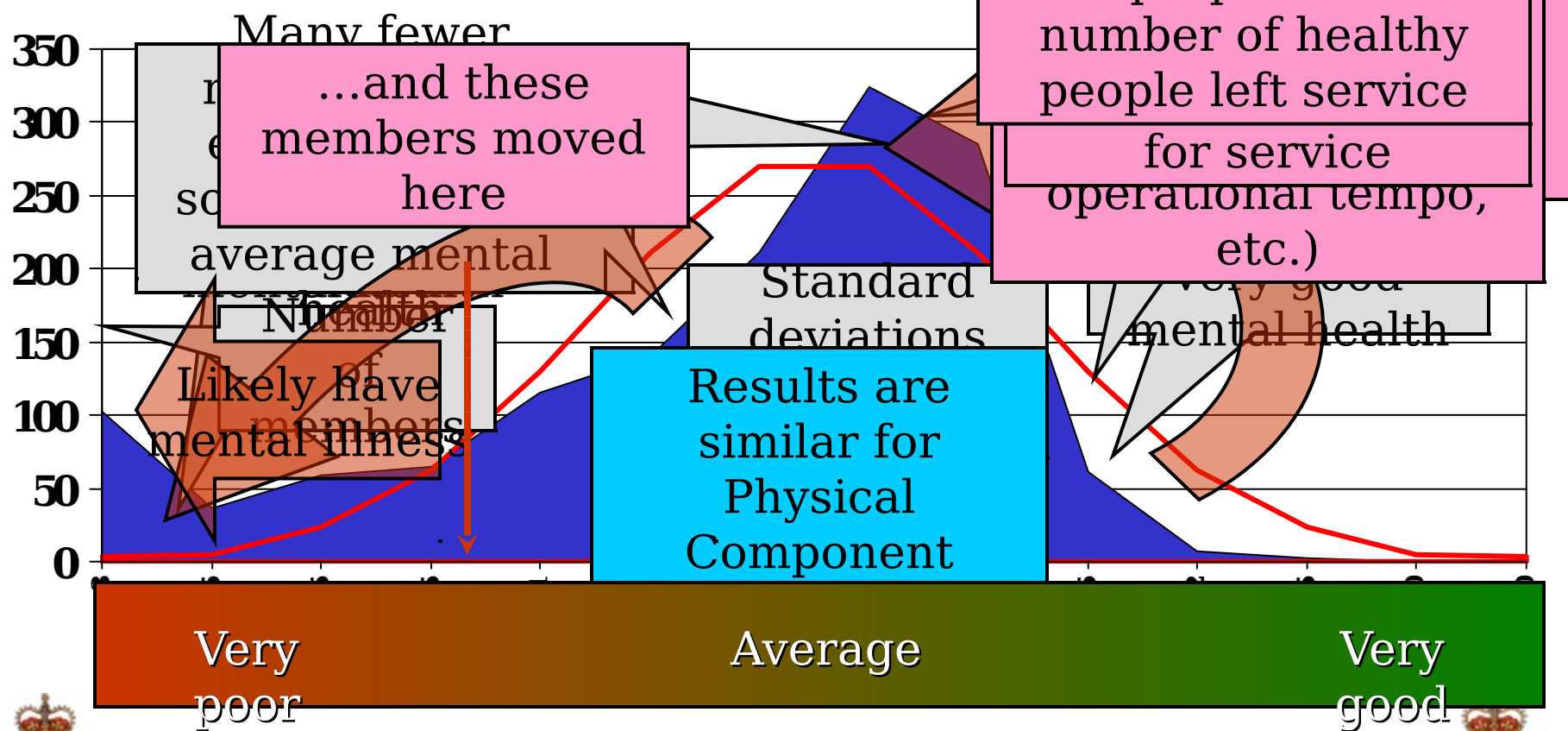
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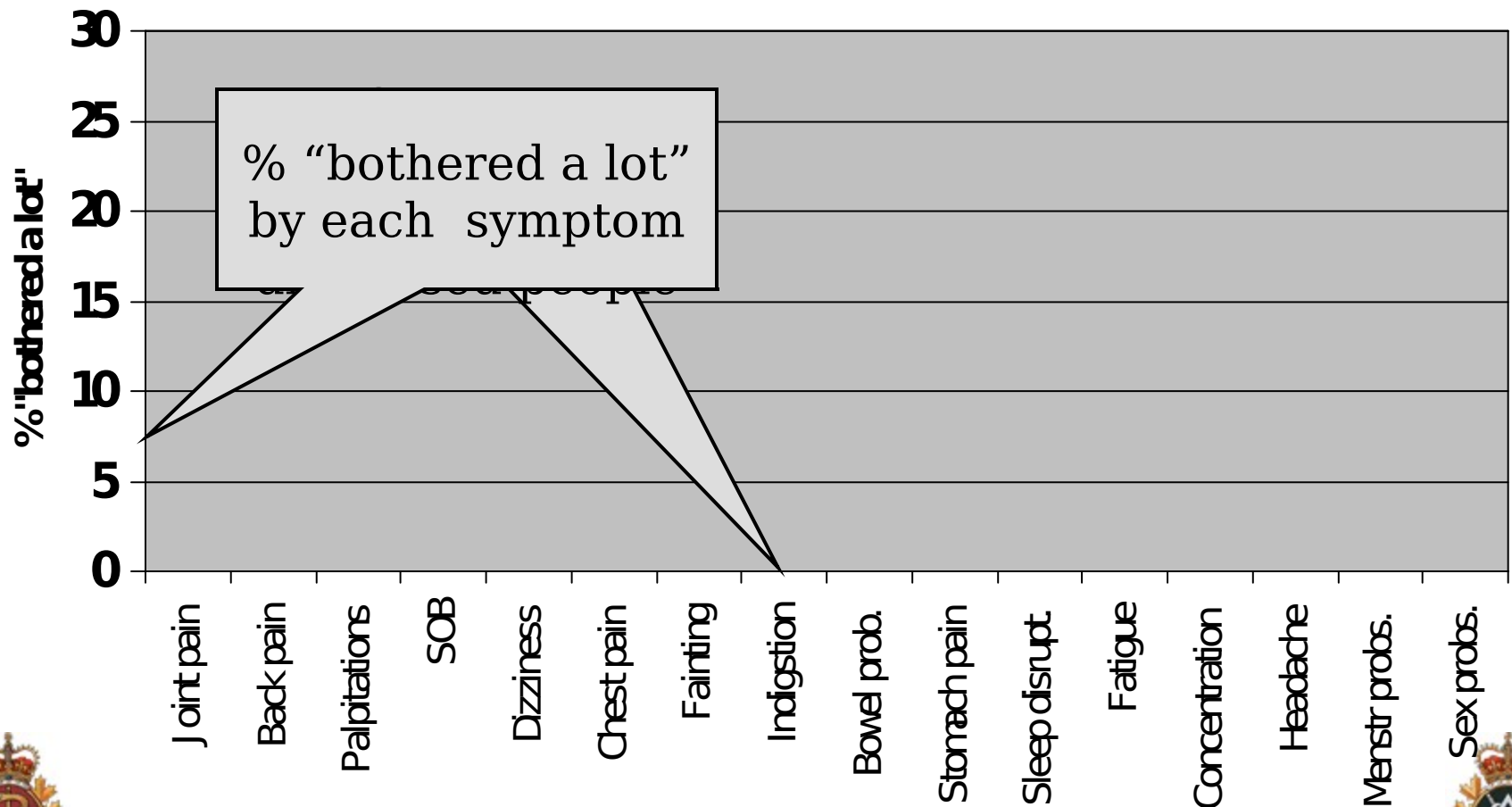
The Unique Effect of Various Conditions on SF-36 Summary Scores



Observed Distribution of SF-36 Mental Summary Scores



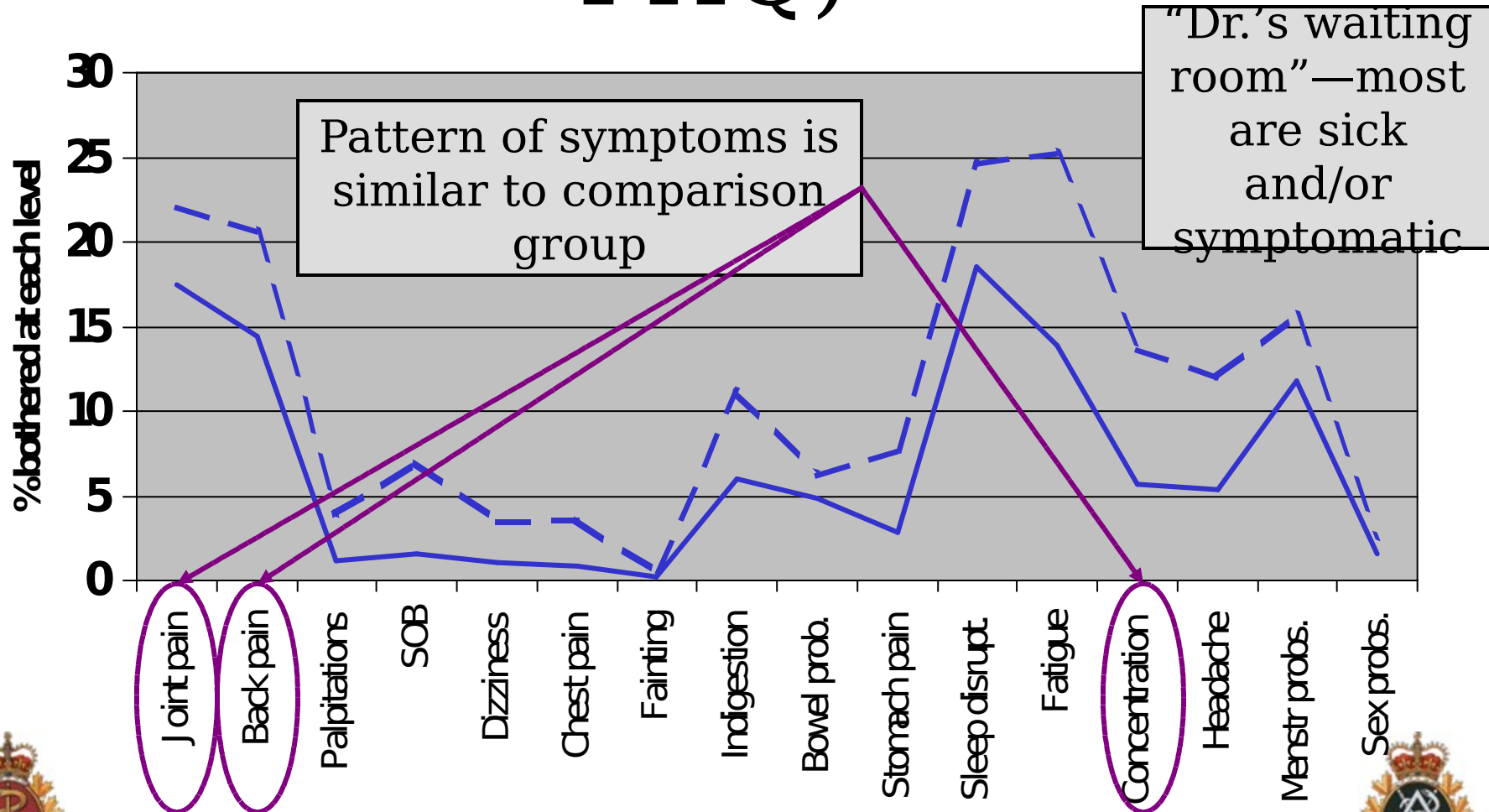
Physical Symptoms from Patient Health Questionnaire (PHQ)



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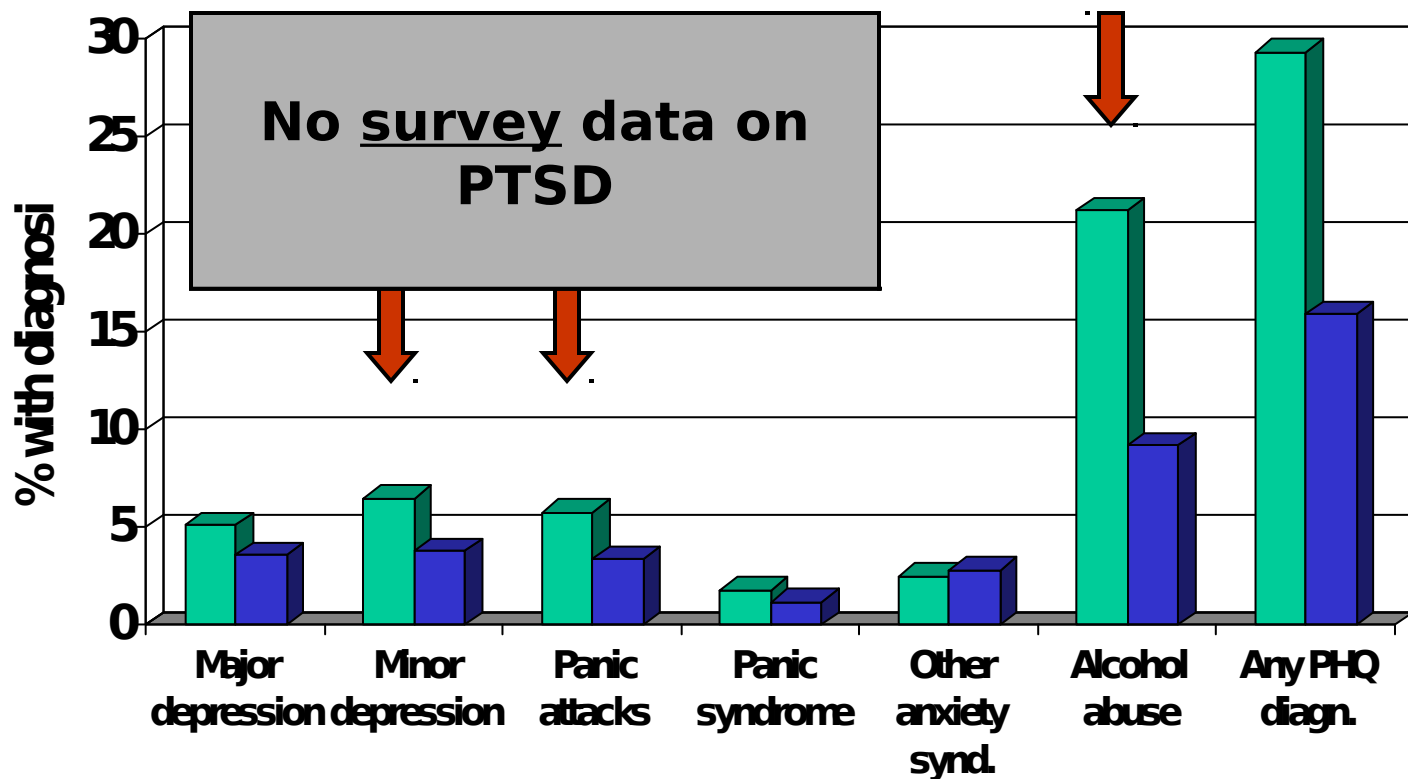
Physical Symptoms (from PHQ)



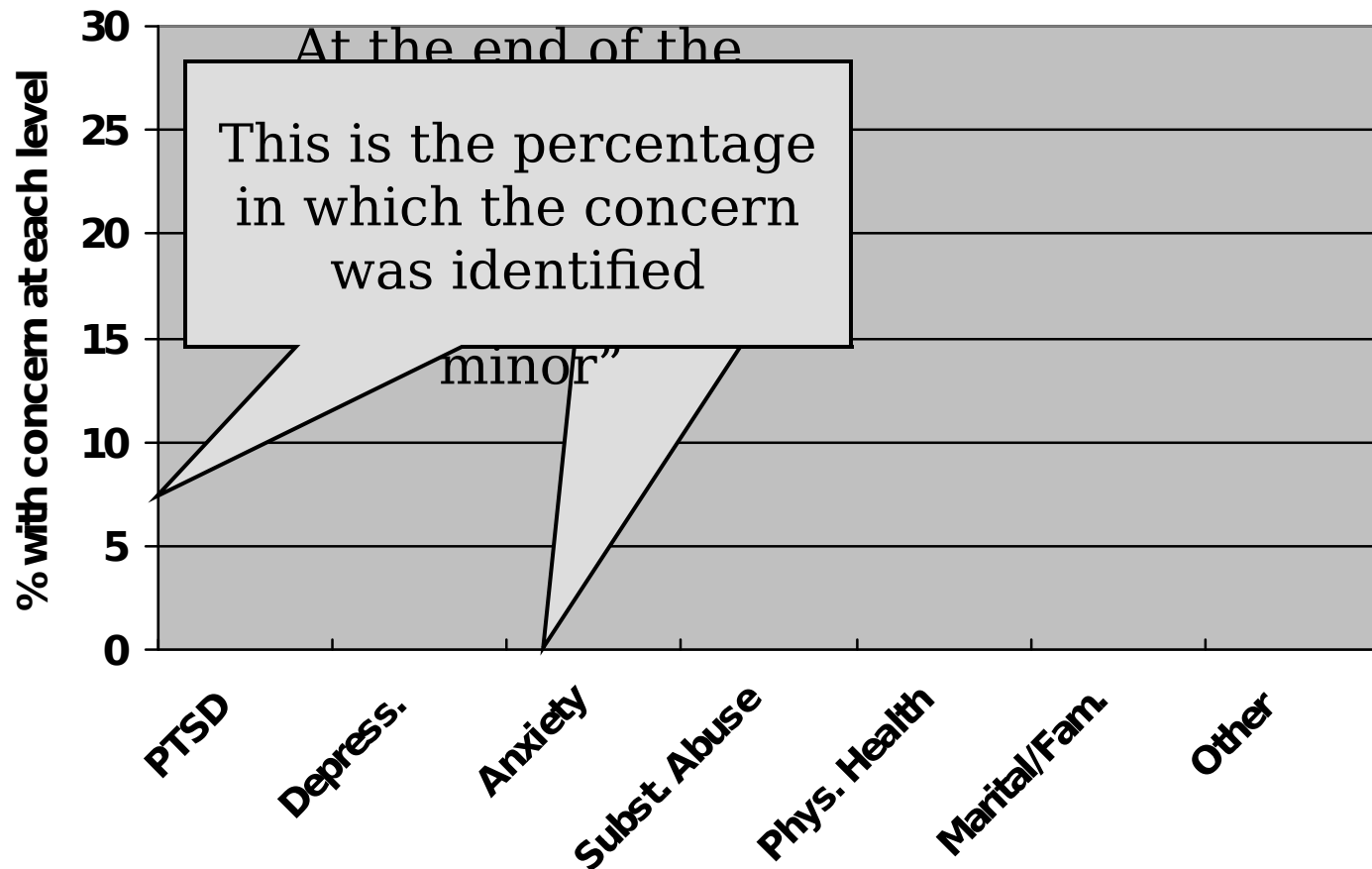
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PHQ Diagnosis: Land Forces vs. Others



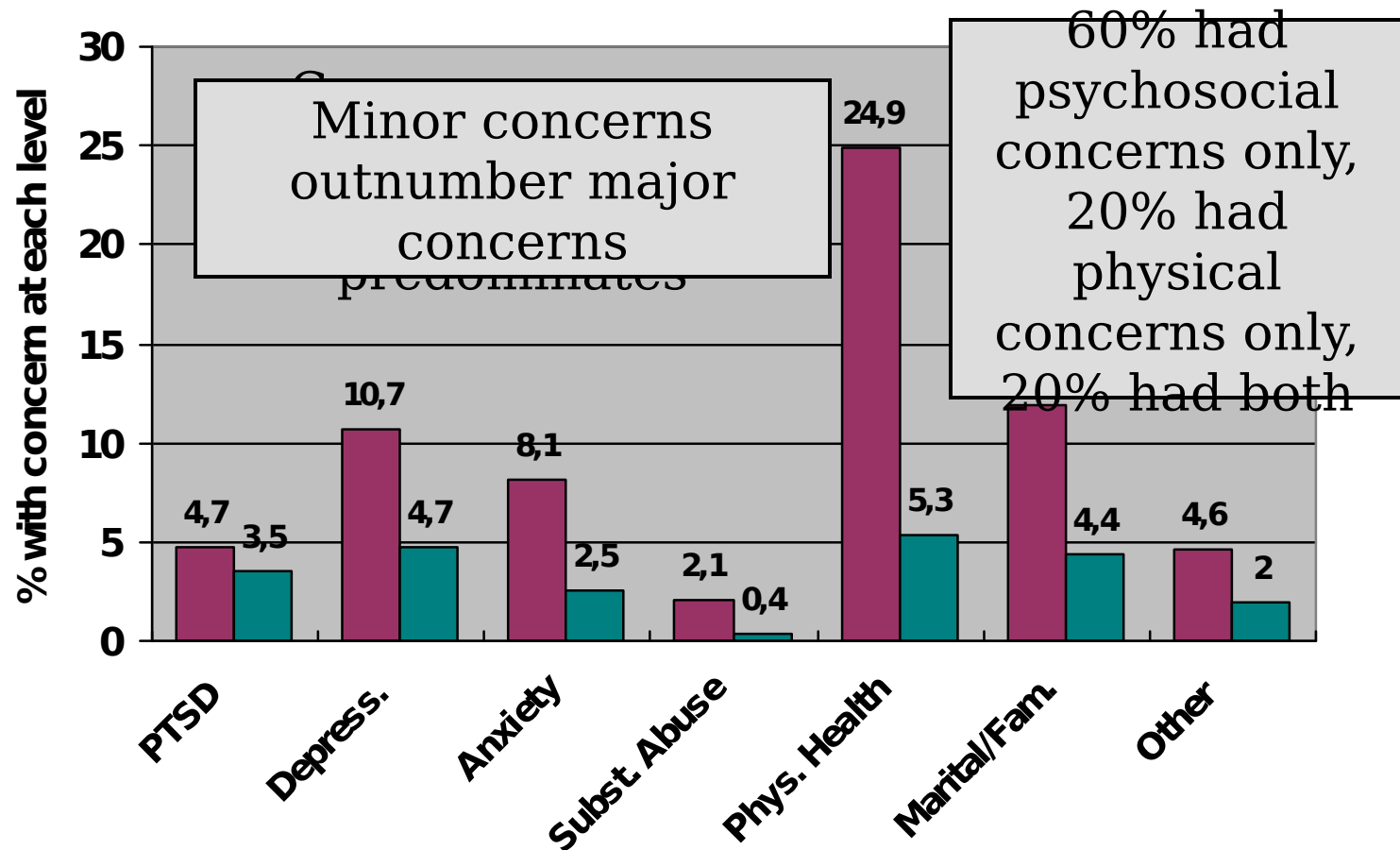
Interviewers' Concerns



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Interviewers' Concerns



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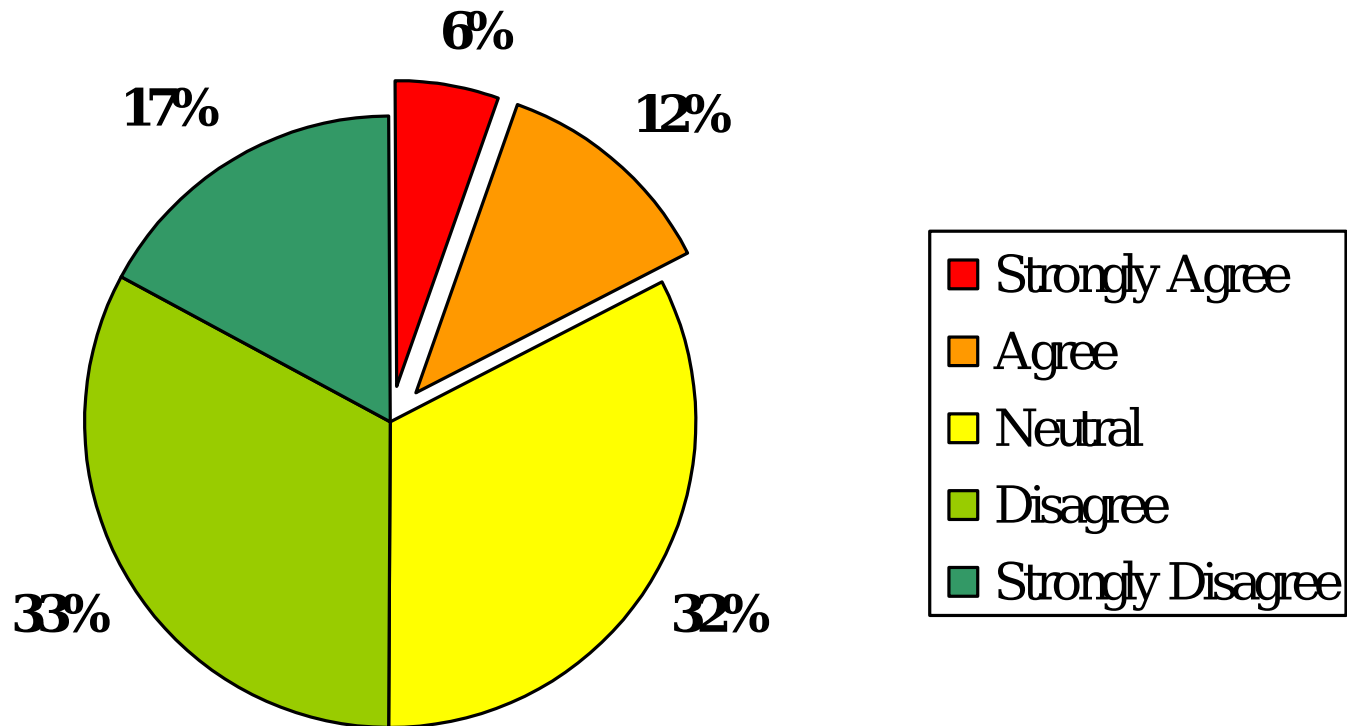


Participant Evaluations

- Participants found this process to be:
 - Comprehensive
 - Sensitive
 - Helpful



“I am concerned that medications, vaccinations, chemicals, or toxins that I was exposed to in preparation for or during my deployment may have harmed my health.”



Limitations

- Preliminary analysis
- Response rate 'only' ~72%
- Data from a single point in time
- Lack of pre-deployment data
- Lack of more objective data on PTSD symptoms
- Based on self-reported symptoms
- Lack of data on final diagnoses



Key Findings

- This enhanced post-deployment screening was very successful in identifying members with problems
- Those with problems have been referred for individualized care
- Members evaluated the program very favourably



Key Findings

- Compared to general population:
 - Significantly and globally reduced physical and mental well-being
 - Likely a somewhat higher rate of diagnosable mental illness
- Some, but not all, of this difference is likely a deployment effect...
 - ...so current countermeasures have not been as effective as we had hoped



Key Findings

- Physical and mental health is similar to or worse than US Gulf War Veterans
- Health of Army participants is worse than others
- No evidence of new symptom syndrome or illness
- Findings are consistent with typical post-deployment health effects



Questions?

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- Op APOLLO Report and other materials:
 - http://hr.ottawa-hull.mil.ca/health/information/op_health/op_apollo/engraph/op_apollo_home_e.asp

